

for prion researchers to refer to the normal nonpathogenic conformation of prions as “cellular prion proteins” (3). When these normal cellular prion precursors convert to pathogenic prion proteins, the transmissible conformations are characterized by  $\beta$ -pleated sheets rather than the normal  $\alpha$ -helix structure, and they do not elicit an immune response (4).

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## Hepatitis E Virus Infection in Sheltered Homeless Persons, France

**To the Editor:** Kaba et al. (1) reported a seroprevalence of 11.6% for hepatitis E virus (HEV) among homeless persons in the city of Marseille, located in southern France, and a multivariate analysis suggested that injection drug use (IDU) was an independent risk factor for HEV transmission. We disagree with this reported finding.

We conducted a retrospective subanalysis of results from a multicenter therapeutic trial assessing HEV seroprevalence among HIV/hepatitis C co-infected patients in France (2). Serum samples from 84 IDU patients, enrolled during 2000–2002 were stored at  $-80^{\circ}\text{C}$ . The mean  $\pm$  SD age of the patients was  $39 \pm 4$  years; 53 (63%) were men, 19 (23%) were born outside France, and 38 (45%) were living in southern France. HEV antibodies were tested with the same assay as that used by Kaba et al. (1), and HEV RNA was detected by using a real-time reverse transcription PCR amplifying open reading frame 3 (3). None of the patients had detectable IgM against HEV or HEV RNA. Test results for 3 (3.6%) patients were positive for HEV IgG. Two of them lived in southern France, resulting in a 5.3% (2/38) HEV prevalence for IDU patients living in this region, where HEV IgG prevalence for healthy blood donors has reportedly ranged from 9% to 16.6% (4).

The difference between our study, which demonstrated low HEV IgG prevalence in IDU patients, even in southern France, and the results from Kaba et al. (1) must be interpreted with caution because there were several epidemiologic differences between the 2 populations. Moreover, there is a risk for false-negative serologic results for HIV patients because of impaired immunity, and the predictive

value of serologic testing is probably low because of the artificially low HEV prevalence reported for this population. Despite these limitations, our study suggests that the high prevalence of HEV infection among homeless persons in southern France was not influenced by IDU, but reflected the general epidemiology of HEV in this region.

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**In Response:** The letter of Larrat et al. (1) raises interesting questions, but we disagree with the authors' conclusion. Their study and ours investigated the seroprevalence of infection with hepatitis E virus (HEV) (1,2); however, the 2 studies examined different populations. We studied homeless persons, for whom analysis of risk factors associated with HEV infection emphasized injection drug use (2). This represented independent data: injection drug use was a behavior associated with increased anti-HEV prevalence; a causal relationship between injection drug use and hepatitis E was not inferred. In contrast to our study population, the population studied by Larrat et al. comprised patients who were co-infected with HIV and hepatitis C virus and who reported injection drug use as the route of HIV or hepatitis C virus transmission: a distinctly different population from homeless persons (1). It is likely that behavior of HIV-positive and HIV-negative intravenous drug users is not the same. Moreover, late seroconversion, persistent seronegativity, and seroreversion of

IgG against HEV have been reported for severely immunocompromised patients, including some infected with HIV (3–5), which brings up the question as to whether prevalence of IgG against HEV is underestimated among severely immunocompromised persons infected with HIV.

Seroprevalence studies of different populations, especially those with differing immune responses, cannot lead except by chance to the same result. Of note, we recently reported that HEV seroprevalence was 2.3% among injection drug users infected with HIV (5).

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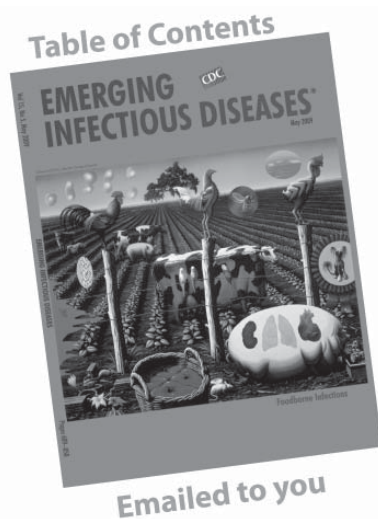
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